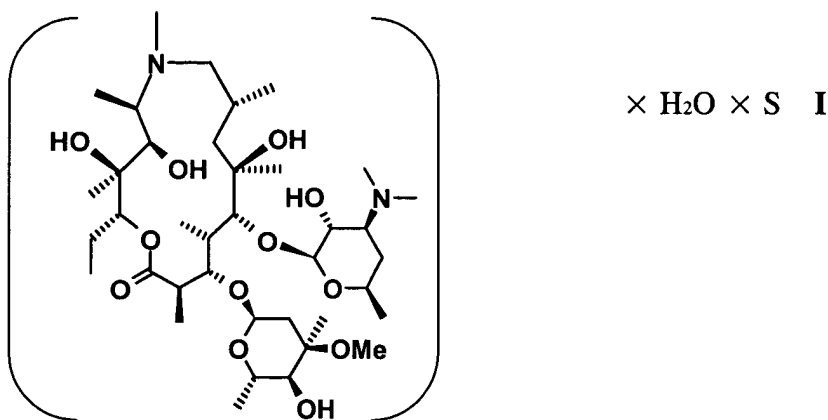


## Abstract

Substantially pure amorphous 9-deoxo-9a-aza-9a-methyl-9a-homoerythromycin A. In addition, this disclosure is directed to a process for the preparation thereof from crude 9-deoxo-9a-aza-9a-methyl-9a-homoerythromycin A via orthorhombic isostructural pseudopolymorphs of 9-deoxo-9a-aza-9a-methyl-9a-homoerythromycin A, of the general formula I



wherein S represents a water-miscible or water-immiscible organic solvent, characterized by the orthorhombic space group  $P2_12_12_1$ , with average unit cell parameters  $a = 8.2$  to  $9.7 \text{ \AA}$ ,  $b = 11.5$  to  $13.5 \text{ \AA}$ ,  $c = 44.5$  to  $47.0 \text{ \AA}$ ,  $\alpha = \beta = \gamma = 90^\circ$ , wherein  $a$ ,  $b$  and  $c$  represent the crystal axes lengths and  $\alpha$ ,  $\beta$  and  $\gamma$  represent the angles between the crystal axes.

In addition, pharmaceutical compositions containing the substantially pure amorphous 9-deoxo-9a-aza-9a-methyl-9a-homoerythromycin A are disclosed, as well as a method for the treatment of bacterial and protozoal infections, and inflammation related diseases in humans and animals by administration of a pharmaceutical composition containing same.